

# Transportation Concept Report

## State Route 119

### September 2006

## I. INTRODUCTION

The Transportation Concept Report (TCR) is a long-range system-planning document that establishes a planning concept for the corridor through the year 2030. The TCR provides route data and information, as well as current and projected (years 2006, 2015, and 2030, respectively) operating characteristics.

Considering reasonable financial and physical constraints, the TCR defines the appropriate Concept Level of Service (Concept LOS) and facility type(s) for each route. It also broadly identifies the nature and extent of improvements needed to attain the Concept LOS. Capacity-enhancing improvements, such as lane additions, are the primary focus for LOS attainment. Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D on State highway facilities, or whichever LOS is feasible to attain. For the purpose of this document, however, the Concept LOS is a "target" LOS determined by the importance of the route and environmental factors. A deficiency (need for improvement) is triggered when the actual LOS falls below the Concept LOS.

However, operational improvements, such as passing lanes, are discussed as interim measures. The TCR also identifies transit, notably the High Speed Passenger Rail System, and the deployment of Intelligent Transportation Systems (ITS) as integral to route corridor development. The Ultimate Transportation Corridor (UTC), or Ultimate Facility, as identified in this TCR, ensures that adequate right-of-way (ROW) is preserved for ultimate facility projects beyond 2030.

However, the UTC does not consider funding as a constraint. Caltrans District 6 System Planning staff should be consulted for the interim ROW (prior to ultimate construction) for a specific location along the corridor. This TCR identifies the initial and conceptual planning phase that leads to subsequent programming and the project development process.

Consequently, the specific nature of proposed improvements, such as roadway width, number of lanes, and access control might change in later project development stages. Final determinations are normally made during the project report and design phases. Therefore, a TCR is a "living document," subject to amendments as conditions change and projects are completed. System Planning staff will update the TCR on a three-to-five year cycle or as needed. The TCR for State Route (SR) 119 was prepared and completed by District 6 Office of System Planning staff in cooperation with local and regional agencies and other Caltrans functional units. As such, it will serve as a guide in cooperative planning and implementation of transportation and land use decisions.

## II. ROUTE DESCRIPTION AND PURPOSE

**Begins:** Within District 6, at the SR 33 Junction in Taft and the community of Ford City

**Ends:** At the SR 99/119 Interchange in Kern County

**Length:** 31-mile highway within Kern County

**Terrain/Land Use:** Primarily a rural route on flat to rolling terrain, SR 119 continues on as Taft Highway, an urban arterial, east of the SR 99/119 Interchange, heading to the community of Lamont. At the beginning of the document (page "i") is an 11x17" foldout Segment Map for SR 119 which shows the location of SR 119 within District 6.

This map shows the 11 segments of SR 119 in Kern County. Land uses include commercial and residential development, as well as oil fields and agriculture in the rural county area. The route also passes through Taft, and the small communities of Valley Acres, Dustin Acres, and Pumpkin City. A Federal Correction Facility is located south of Taft. Recreational land use includes the Buena Vista Lake and Golf Course and the Taft Airfield for skydiving and sailplane participants.

## A. Modal Alternatives

**Amtrak:** Amtrak does not provide passenger rail services along any portion of SR 119. At PM 26.77 tracks of the San Joaquin Valley Railroad cross SR 119. These tracks originate in Bakersfield and terminate in central Taft but are used solely to haul freight and other commerce. The Amtrak San Joaquin Route runs six passenger trains on a daily basis through the San Joaquin Valley with connections in Kern County to Bakersfield and Wasco. However, neither of these cities are traversed by SR 119.

**Transit Services:** Both fixed-route and dial-a-ride buses serve the local traveler in Kern County. Common transit carriers in Kern County include Greyhound Bus Lines, Orange Belt Stages, the Airport Bus of Bakersfield, and the Amtrak bus. Taft Area Transit, a dial-a-ride service operates in Taft and serves Taft Heights, South Taft, and Ford City. Kern Regional Transits' Westside Express provides service to and from Bakersfield six days a week. *For a list of specific transit providers, please see the Transit Services chart in the Appendix at the end of this TCR.*

**High Speed Rail:** The California High Speed Rail Authority (CHSRA) has developed a plan to build a high-speed rail line from San Diego to San Francisco. Electric-powered, high-speed trains could be operated at speeds up to 200 mph, allowing for travel from downtown San Francisco to Los Angeles in approximately 2 1/2 hours. The proposed 700-mile-long system would stretch from San Francisco, Oakland, and Sacramento in the north, through the Central Valley, and to the south through Los Angeles, and San Diego.

Should the CHSRA choose the Grapevine route alignment (instead of the currently proposed Palmdale/Lancaster/Tehachapi route), it may parallel I-5 and SR 99 and the station would be in the Bakersfield Metro area. The high-speed rail line would connect to the State's existing transportation network with station links to airports, intercity rail and bus lines, commuter rail, and urban rail transit lines. This will directly benefit all motorists with traffic reductions and will help improve travel times.

**Bicycle Routes/Facilities:** From the beginning of SR 119 at SR 33 in Taft to its terminus at SR 99 south of Bakersfield, SR 119 is comprised of conventional highway segments, all of which are open to bicycle travel. As roadway rehabilitation is done, shoulders will be added. Currently, shoulder width ranges from 0 to 12 feet and therefore several portions of this route are not recommended for bicycle travel. Within the Bakersfield 2004 General Plan Circulation Element (Chapter 3), SR 119 is listed as a "future bikeway" from Heath Road (currently an unconstructed intersection located at PM 22.20) to SR 99 in Pumpkin Center.

Also, within Taft, the 2001 Kern County Bike Plan lists SR 119 as a "planned" bikeway from SR 33 (PM 0.00) to Street/Airport Road (PM 0.30). *Please refer to the "Bicycle Routes and Facilities" section of the Appendix for more detailed information on bicycle facilities along SR 119.*

**Pedestrian Access/Facilities:** Pedestrian and American with Disabilities Act (ADA) concerns remain to be addressed throughout Segments 1 and 2 (PM 0.00 - PM 2.20), within Segment 4 from PM 6.20 - PM 6.70 (Valley Acres), and from PM 7.50 - 8.36 (Dustin Acres), and throughout Segment 11 (PM 30.40 - PM 31.30). Currently, a majority of this area lacks sidewalks or other pedestrian facilities and will need upgrading to current standards as projects are initiated along SR 119. *Please refer to the "Pedestrian Access and Facilities" section of the Appendix for more detailed information on pedestrian and ADA access along SR 119.*

## B. Intelligent Transportation Systems

Applications of Intelligent Transportation Systems (ITS) exist or are proposed throughout the extent of SR 119, which include: changeable message signs (CMSs), highway advisory radio (HAR), weather stations (WS), and the 511 System.

The 511 system is a new three-digit phone number program to access travel information that is being implemented throughout various areas of the country. Caltrans Reverse Commute Study/Special Studies Branch is working with Traffic Operations and Caltrans' Districts to develop a "California 511 Strategic Deployment Plan for Rural and Inter-Regional Traveler Information System" to meet the traveler's highway and transit information needs. Communication lines will be enhanced by the fiber optic network planned along the SR 99 corridor.

When fully implemented, 511 would be an easy to remember telephone number that can be accessed by travelers before and during their trip to obtain information about State highways, local roads, local transit, and State and local trains. At this time, the 511 system is not available in the Central Valley. Deployment of ITS technology will enhance operational and safety efficiency of the route by informing motorists of traffic congestion, inclement weather, such as, blowing dust, fog, highway construction, and/or closings. The Caltrans Central Valley Transportation Management Center (TMC) monitors specific traffic locations from its headquarters at the District Office in Fresno. In addition, the Kern Council of Governments (Kern COG), through the creation of the Kern Motorist Aid Authority, operates and maintains a motorist aid call box system within Kern County. *For specific ITS information on SR 119 see the Appendix at the end of this report.*

## C. State Route 119 Highway Facts

- In 1933, SR 119, formerly known as SR 140, was added to the State Highway System. The entire length of the route is located in Kern County.
- In District 6, SR 119 is functionally classified as a Principal Arterial, in and near Taft, and a Minor Arterial for most of the remainder of its length. The route is a Principal Arterial in the latter three segments near SR 99.
- SR 119 is important as an intra-regional route for agricultural and oil industry-related traffic. The route serves as a commuter route between Taft and Bakersfield.
- The Annual Average Daily Traffic (AADT) ranges from 5,000 to 12,600, with trucks constituting up to 22 percent of the AADT.
- The SR 119 rural highway is also referred to as Taft Highway.
- A Federal Oil Reserve Land easement is located along the route in Segment 5, Golf Course Road to Aqueduct Service Road.
- This route is designated as a State Highway Terminal Access Route for larger trucks under the STAA from SR 33 to SR 99.

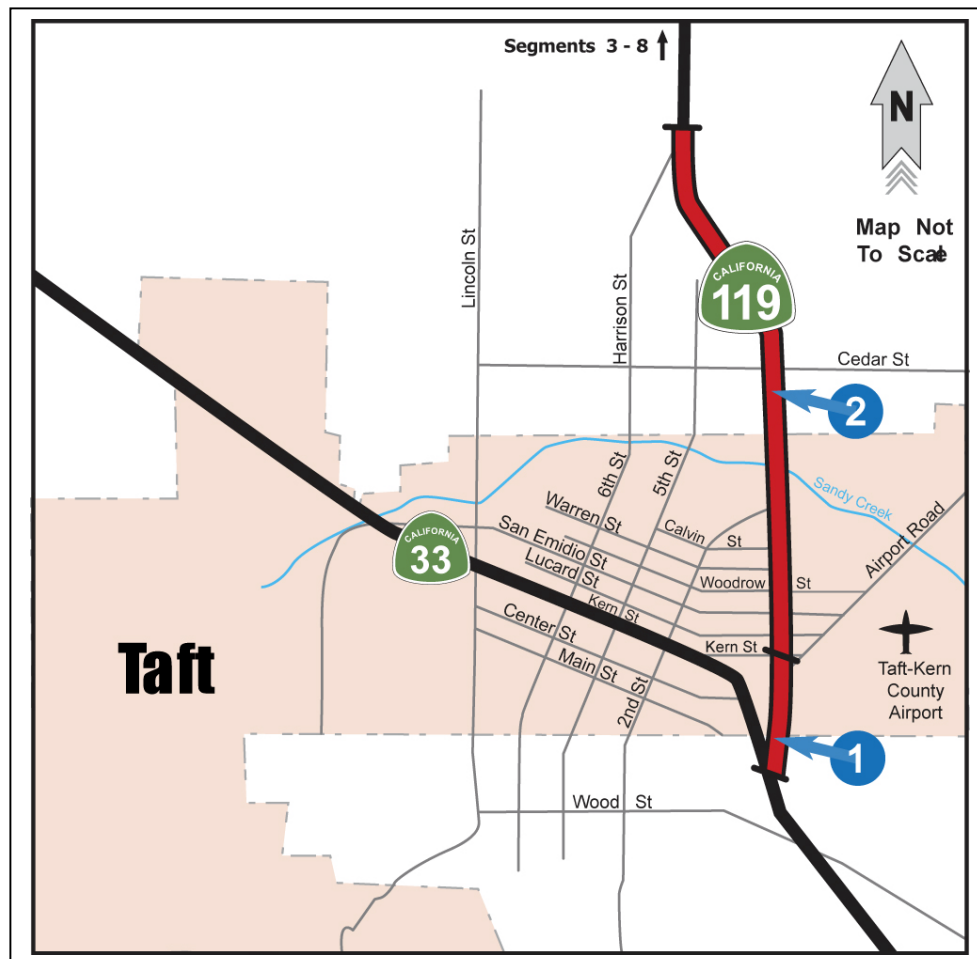
## D. Specific Environmental Considerations

Specific sensitive biological species in Kern County include, but is not limited to, the following flora and fauna: FLORA-wetland areas, Bakersfield cactus, California Jewel Flower, Kern Mallow, Alkali Mariposa lily plants, San Joaquin Woollythreads; FAUNA-San Joaquin kit fox, Giant Kangaroo Rat, Tipton Kangaroo Rat, Blunt-nosed leopard lizard, burrowing owl, Kern Canyon salamander, and migratory birds. In addition, there are historical and archaeological sites that will need to be investigated. Environmental considerations to improvements on the route include the Kern River, the California Aqueduct, oil land, and commercial and residential development in existence along the route.

### III. Geometrics, Land Use, and Environmental Considerations

#### *Segments 1-2: SR 33 to 0.3 MI North of Harrison Street*

**Land Use:** Within Taft, SR 119 serves as a main arterial through the city. Taft includes a mix of commercial and/or residential development with surrounding oil fields.



**Environmental/Historical Resources:** Oil industry concerns surround the route. An oil museum is located at the intersection of SR 33 and 119. Context Sensitive solutions may be considered in all improvements to the route.

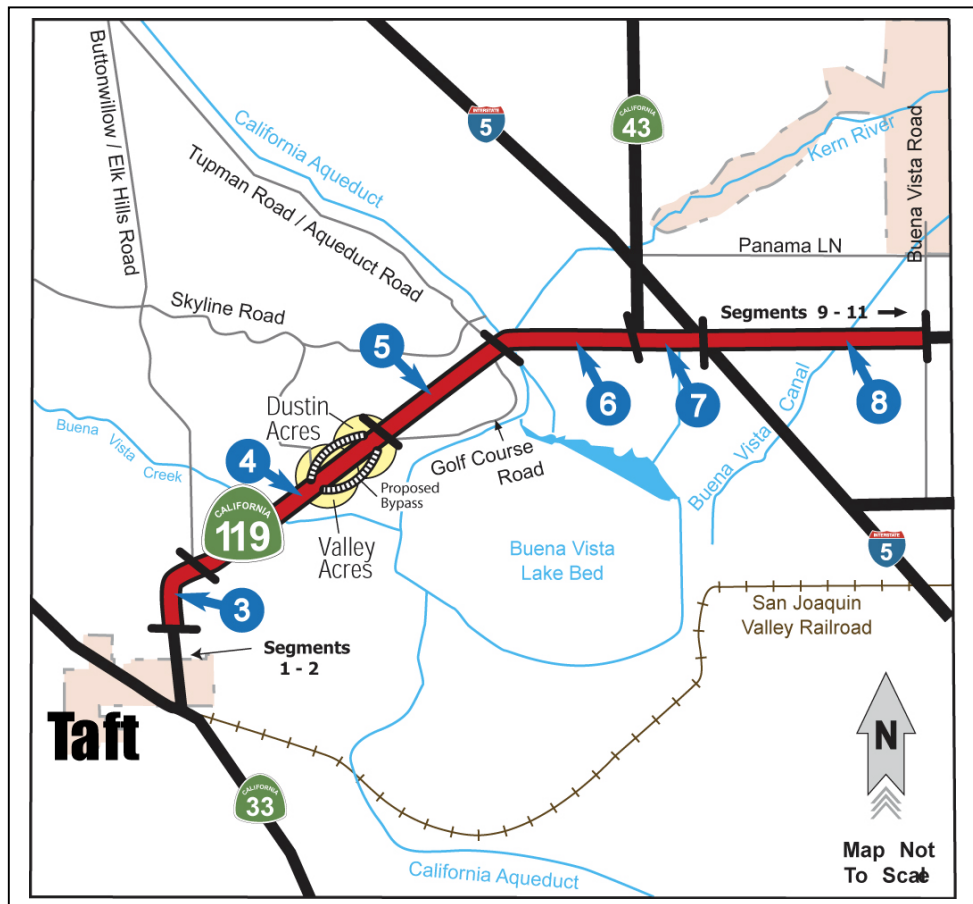
**Facility:** SR 119 consists of a 4-lane expressway from SR 33 to Kern Street and a 2-lane expressway from Kern Street to 0.3 MI North of Harrison Street.

*Interchange(s) and other State Highway connections:*

- SR 119 intersects with SR 33.

**Segments 3-8: 0.3 MI North of Harrison Street to Buena Vista Road**

**Land Use:** Segments 3-8 are rural segments. The segment begins with rolling hills and ends with level land near the urban boundary of Taft. SR 119 traverses through small communities, such as Valley Acres and Dustin Acres. The route passes through Federal Oil Reserve land and is near the Buena Vista Aquatic Recreation area and Buena Vista Golf Course. The Kern River and California Aqueduct passes under SR 119.



**Facility:** The highway is a 2-lane expressway and 2-lane conventional highway.

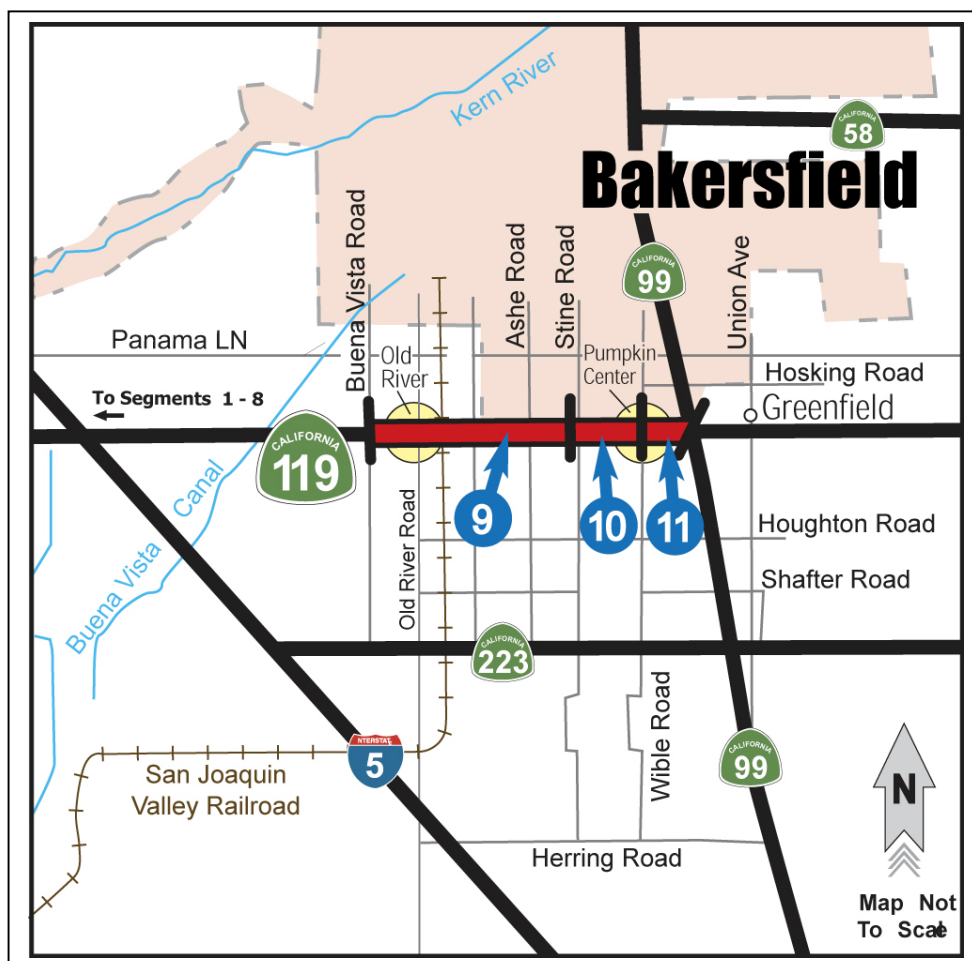
*Interchange(s) and other State Highway connections:*

- Interchange connection at I-5 (north to south).
- Intersection at SR 43.

**Environmental/Historical Resources:** The primary environmental issues in Kern County are oil reserves and endangered species, primarily the kit fox and the Bakersfield cactus. Issues include archaeological sites, water and sensitive resources near the Kern River, the California Aqueduct, and the Buena Vista Recreational area. Geological issues may be a primary concern in the oil fields. ROW acquisitions and preservation are important issues for future widening of the route. ROW acquisition may be cost prohibitive and environmentally significant. Oil fields and agricultural lands in these segments need to be given appropriate environmental consideration for ROW purposes.

### Segments 9-11: Buena Vista Road to SR 119/99 Separation

**Land Use:** Agricultural land and small communities with residences and commercial development are near the SR 99/119 Interchange connection. New houses are being constructed in the northwest quadrant of the SR 99/119 Interchange. The population increase near the interchange will create additional traffic congestion on the route and in the area.



**Facility:** The route begins and ends as a 2-lane highway in Segment 9-11.

#### *Interchange(s) and other State Highway connections:*

- Interchange connection at SR 119/99.

**Environmental/Historical Resources:** Environmental concerns involve the small communities bisected by SR 119. Context Sensitive Solutions (CSS) may be considered for the small communities in the urban areas of the route, especially near the SR 119/99 Interchange. Right-of-way acquisition for future projects should be considered in light of the congested corridor created by urban congestion.

## IV. Concept Rationale

### Route Concept LOS:

LOS D was assigned to the urban portions of SR 119 in Taft and Segments 8-11 in Bakersfield. The remainder of the route (Segments 3-7) from the urban portion of Taft to Interstate 5 has been given a



LOS C designation. Commuter traffic from Taft to Bakersfield combined with heavy truck traffic makes the LOS C for the majority of the route an appropriate designation.

**Concept Facility:** The SR 119 Concept Facility varies according to facility type; the following list shows the facility for the year 2030, beginning with the segment at the SR 33/119 Junction and proceeding eastward to the SR 99/119 Interchange.

- **4-lane expressway (Segment 1):** The existing highway will remain a 4-lane expressway.
- **4-lane expressway (Segments 2-3):** Widen from an existing 2-lane expressway to a 4-lane expressway.
- **4-lane expressway (Segment 4):** Convert from an existing 2-lane conventional highway facility to a 4-lane expressway.
- **4-lane expressway (Segment 5):** Widen from an existing 2-lane expressway to a 4-lane expressway.
- **4-lane expressway (Segment 6-7):** Convert from an existing 2-lane conventional highway to a 4-lane expressway.
- **4-lane conventional highway (Segment 8-11):** Widen from an existing 2-lane conventional highway facility to a 6-lane conventional highway.

Adequate ROW must be available to accommodate any planned expansions on the route. Route 119 between Interstate 5 and Route 99 (Segments 8-11) 2030 Concept will be a 6-lane, limited access conventional highway. The Kern Council of Government's Regional 2004 Transportation Plan supports this designation as development occurs along the corridor. This conversion of Route 119 will be supported by local development fees and mitigation. SR 119 may be impacted by the future construction of the South (east-west) and West (north-south) Beltway Freeways. Kern County has adopted a South Beltway Specific Plan.

Construction will begin on the West Beltway Freeway in the near future. The Ultimate Transportation Corridor (UTC), or Ultimate Facility beyond the year 2030, for Segments 1-8 is designated as a 4-lane expressway. The UTC for Segments 8-11, from Interstate 5 to Route 99, is indicated as a 6-lane conventional highway at 134 feet. The 2004 Kern County General Plan Circulation Element designates this portion of Route 119 as a 6-lane expressway. Caltrans and the City of Bakersfield, which has a Sphere of Influence to I-5 on Route 119, are in agreement that the geometric highway standard will be held to 134 feet but with the more limited expressway access.

## V. State Route 119 Transportation Concept Report Summary Chart

The 2-page Summary Chart on the following pages indicate that SR 119 is divided into 11 distinct segments that provide descriptive and technical information, both current and forecast, for the State highway. It also has a linear geographic diagram that illustrates the major State and local highway facilities, along with key natural features and City/County boundaries, current highway geometrics, i.e., conventional highway, expressway, and freeway.

A "Chart Explanation" bar defines what is shown on the Chart with the exception of self-explanatory technical information. The Summary Chart also delineates functional classification, various highway designations, environmental information, and general plan information.

*See the following two pages for the Summary Chart.*







## VI. A Review of Route 119 Performance: Current and Future

As of the year 2006, SR 119 is operating at a LOS D, with the following exceptions: Segments 1 and 2 in Taft operate at LOS B and Segment 8 at LOS C. By the year 2015 and 2030, the LOS on the route will deteriorate to D, E, or F, with the exception that Segment 1 in Taft will remain at LOS B.

The City of Bakersfield's annexation and sphere of influence of land near the route will impact the route segments located near the SR 99/119 Interchange. Specifically, Segments 9, 10, and 11 located in the urban area near the SR 99/119 Interchange is forecasted at LOS E and F by the year 2030, without improvements or the addition of the South Beltway Freeway. With improvements, traffic congestion on the highway will decrease.

The communities of Dustin Acres and Valley Acres may be impacted by the amount of through traffic on SR 119. A bypass around the communities may be considered as one alternative for resolution, according to the Kern County General Plan. Other mitigation measures may include traffic system management solutions.

A South Beltway (east-west route) Route Adoption and Environmental Study and a new West Beltway Route (north-south route) have funds earmarked in SAFETEA-LU (see map at the end of Section VII). SAFETEA-LU is the new 2005 Federal Transportation Act. The South Beltway proposes a new freeway alignment south of, and parallel to, SR 119. The new route proposes to connect Routes 58 East with Routes 99 and I-5. Future construction of the South Beltway will help to alleviate traffic congestion for travelers.

The West Beltway Freeway construction proposal will provide a north-south connection from 7<sup>th</sup> Standard Road to SR 58 West, SR 119, and the proposed South Beltway Route. The West Beltway alignment will parallel the SR 99 corridor to the west. An interchange connection is planned at the West Beltway Freeway and SR 119. At this time, the West Beltway impact on SR 119 is uncertain.

In 1933, SR 119 was added to the State Highway System. Currently, all of the facility is a 2-lane conventional highway or expressway, with the exception of a short 4-lane facility in Segment 1. The mostly 2-lane route is insufficient to accommodate inter/intra-regional travelers and heavy truck traffic from Bakersfield to Taft. Future plans on the route consist of 4 and 6-lane widening projects which will extend for the entire route.

Restrictions to widening the route include ROW considerations. ROW and environmental considerations are especially sensitive to the small communities bordering the route. The existence of oil and agricultural related land uses need to be a consideration to ROW acquisition along the route.

The Ultimate Transportation Corridor (UTC) needs to be preserved on SR 119 for future improvements. One important UTC consideration is the Federal Oil Reserve ROW issues in the areas with rolling terrain. A cooperative effort between the Federal government, Kern Council of Governments (KCOG), local governments, and Caltrans may resolve UTC issues and other concerns along the route.

Caltrans will continue to work on ITS improvements, such as ramp metering, changeable message signs, highway advisory radio, and other strategies to more effectively sustain and improve traffic flow, particularly in the urbanized areas. The increase in population and the growth of traffic has surpassed the capacity expectations of the route. Operation and system improvements to the route need to be instituted to accommodate future growth in the region.

With the projected growth in statewide, interregional, and local commuter traffic, the congestion on SR 119 will continue to increase. Over the next 25 years and beyond, Caltrans and local agencies will continue to work on solving problems associated with the route. Funding sources to improve SR 119 will be a continuing problem for all agencies. The Metropolitan Bakersfield Transportation Impact Fee Program (Metro Fee Program Candidate) will provide funds for improving SR 119, including signals, widening, and improving the SR 99/119 interchange.

Projected financially constrained improvements to SR 119 will be funded by Kern COG and other local sources in Kern County where the route traverses. This includes a current STIP project (Cherry Avenue to Tupman Road) and other SHOPP or minor projects. The Regional Improvement Program (RIP) funds and other local funds will be an available source of funds for projects. Kern COG's Regional Transportation Plan (RTP) includes program and projects for route improvements.

The "Livable Communities" concept on SR 119 may need to be implemented, particularly in the urban area and smaller communities. The execution of the concept acts to scale down the magnitude of its impact as well as increase the aesthetics of the system.

Also, environmental justice will dictate how and where SR 119 will expand, as to not overwhelm small communities. Context sensitive solution stresses sensitivity to community needs. In any case, Caltrans will need to continue emphasizing the further rehabilitation, operational, and capacity improvements of SR 119, due to its intra-regional importance.

## VII. Planned and Programmed Improvements to Route 119

The table on the following two pages show both the planned and programmed projects for SR 119 over the next 25 years. The projects shown are capacity-increasing projects.

The table shows:

1. The specific segment.
2. SR 119 Planned Projects-the listing document (RTP, or Metropolitan Bakersfield Transportation Impact Fee Program Candidate (Metro Fee Program Candidate), or STIP Candidate), description of the project, and known pertinent data.
3. SR 119 Programmed Projects-the listing document (STIP), description of the project, and projected begin and completed construction dates.

*See the following two pages for the planned and programmed projects, and the end of this section for a map showing Proposed Bakersfield Metro Projects.*

Project scope and technical data are for general informational purposes only. If current information is needed, please verify with the Caltrans District 6 Office of Advance Planning at (559) 445-4162.

Segment PM From/To	SR 119 Planned Projects	SR 119 Programmed Projects
1 KERN PM 0.0/0.3 RTE 33 to Kern St	<b>RTP:</b> KER 119 PM 0.0/ 6.2, From RTE 33 to Cherry Ave.: Widen to 4-lanes: (2025)	There are no projects currently programmed in this segment.
2 KERN PM 0.3-2.2 Kern St to 0.3 MI N of Harrison St Urban Boundary of Taft	<b>RTP:</b> KER 119 PM 0.0/ 6.2, From RTE 33 to Cherry Ave.: Widen to 4-lanes: (2025).	There are no projects currently programmed in this segment.
3 KERN PM 2.2-R4.4 Urban Boundary of Taft to 0.6 MI N of Buttonwillow- Elk Hills	<b>RTP:</b> KER 119 PM 0.0/ 6.2, From RTE 33 to Cherry Ave.: Widen to 4-lanes: (2025)	There are no Programmed Projects in this segment.
4 KERN PM R4.4/R9.1 0.6 MI N of Buttonwillow- Elk Hills to Golf Course Rd	<b>RTP:</b> KER 119 PM 0.0/ 6.2, From RTE 33 to Cherry Ave: Widen to 4-lanes: (2025)  <b>RTP, STIP Candidate:</b> KER 119 PM 5.5/13.3, Near Taft from Cherry Av to Tupman Rd: <i>Widen from 2-lane conventional to 4-lane expressway (2C-4E) (2019-2023)</i>	1998 STIP: KER 119 PM 5.5/13.3 Near Taft from Cherry Ave to Tupman Rd: Widen from 2-lane conventional highway to 4-lane expressway (2010).
5 KERN PM R9.1/R13.3 Golf Course Rd to Aqueduct Service Rd	<b>RTP, STIP Candidate:</b> KER 119 PM 5.5/13.3, Near Taft from Cherry Av to Tupman Rd.: <i>Widen from 2-lane conventional to 4-lane expressway (2C-4E) (2019-2023)</i>  <b>RTP, STIP Candidate:</b> KER 119 PM R13.2/21.2, Tupman Rd to 119/5 SEP: <i>Widen from 2-lane conventional to 4-lane expressway (2025)</i>	1998 STIP: KER 119 PM 5.5/13.3 Near Taft from Cherry Ave to Tupman Rd: Widen from 2-lane conventional highway to 4-lane expressway (2010).
6 KERN PM R13.3/R18.3 Aqueduct Service Rd to RTE 43	<b>RTP:</b> KER 119 PM R13.2/21.2, Tupman Rd to 119/5 SEP: <i>Widen from 2-lane conventional to 4-lane expressway (2025)</i>	There are no projects currently programmed in this segment.
7 KERN PM R18.3/19.8 RTE 43 to RTE 119/5 SEP	<b>RTP:</b> KER 119 PM R13.2/21.2, Tupman Rd to 119/5 SEP: <i>Widen from 2-lane conventional to 4-lane expressway (2025)</i>	There are no projects currently programmed in this segment.

Segment PM From/To	SR 119 Planned Projects	SR 119 Programmed Projects
8 KERN PM 19.8/25.6 RTE 119/5 SEP to Buena Vista Road	<b>RTP, STIP Candidate:</b> KER 119 PM R19.8/25.3, 119/5 Separation to Buena Vista Rd: Widen from 2-lane conventional to 4-lane expressway (2030).  <b>RTP, Metro Fee Program Candidate:</b> KER 119 PM 25.3/31.3, Buena Vista Rd to 119/99 Separation: Widen from 2-lane conventional to 4-lane divided highway (Future)	There are no projects currently programmed in this segment.
9 - 11 KERN PM 25.6/31.3 Buena Vista Road to RTE 119/99 SEP	<b>RTP:</b> KER PM 25.3/31.3, Widen from 2-lane conventional to 4-lane divided highway (Future)	There are no projects currently programmed in this segment.

*See the Appendix at the end of this TCR for References, Glossary, ITS, Transit, Bike and Pedestrian Facilities information.*

*See the next page for a map showing Proposed Bakersfield Metro Projects.*